

ABSTRACT

A system for catalytically treating a gas stream includes a gas phase reactor containing a catalyst for the treatment of the gas stream in at least one catalyst bed having an upstream end and a downstream end, an axial fan positioned upstream of the at least one catalyst bed and having an impeller for moving the gas stream through the gas phase reactor. The gas flow is modified between the impeller and the gas phase reactor to decrease gas stream velocity and increase gas flow uniformity.